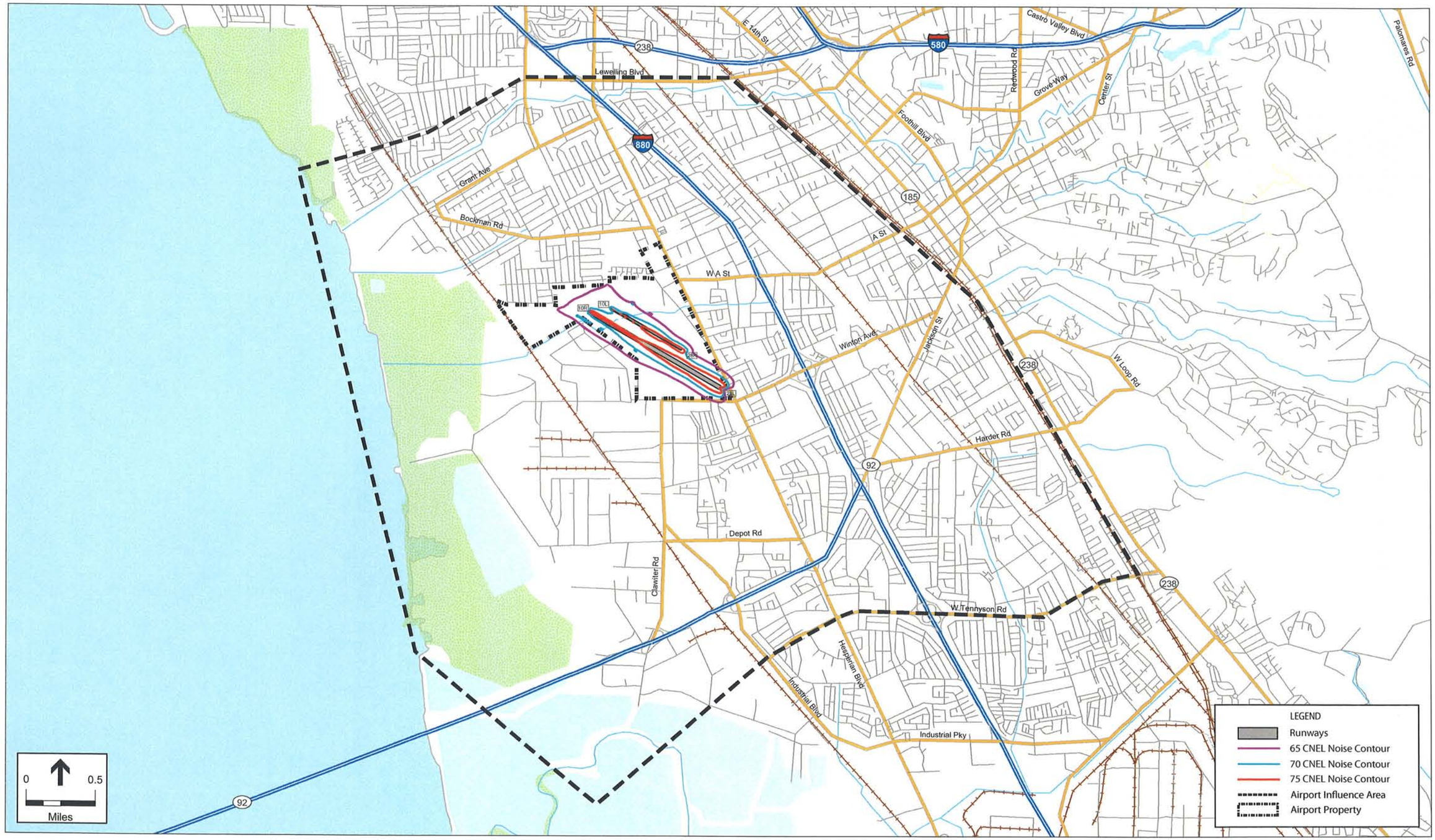
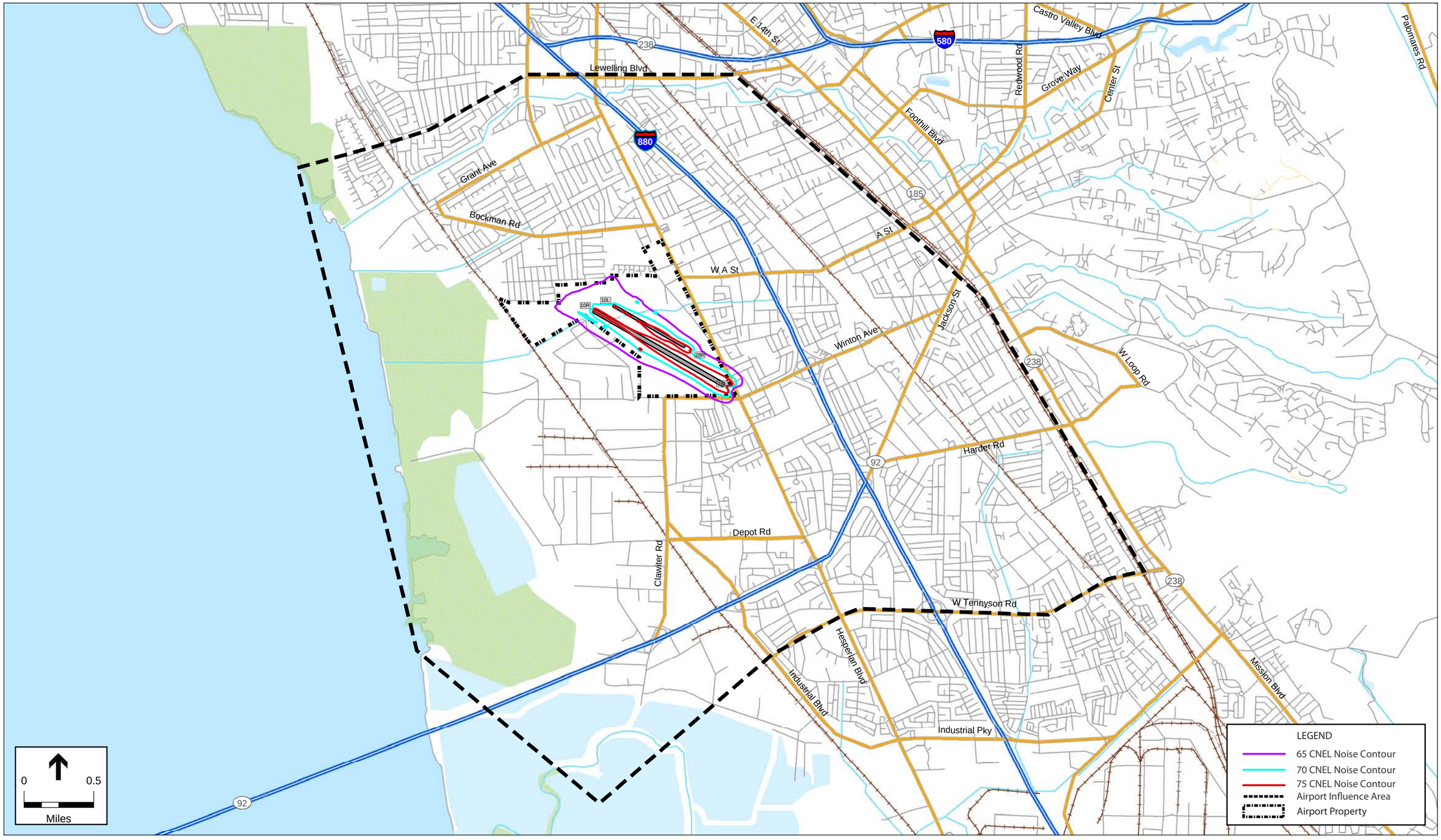


SOURCE: ESA Airports, ESRI, City of Hayward GIS Department

Figure 3-10
2005 Noise Contours



SOURCE: ESA Airports, ESRI, City of Hayward GIS Department

Figure 3-11
2020 Noise Contours

3.10-1.5 Interior Noise Levels

Land uses for which interior activities may be easily disrupted by noise shall be required to comply with the following interior noise level criteria.

(a) The maximum, aircraft-related, interior noise level which shall be considered acceptable for land uses near HWD is 45 dB CNEL in:

- Living and sleeping areas of single- or multi-family residences;
- Hotels and motels;
- Hospitals and nursing homes;
- Churches, meeting halls, office buildings, and mortuaries; and
- Schools, libraries, and museums.

(b) Calculations should assume that windows are closed.

(c) When reviewed as part of a general plan or zoning ordinance amendment or as a major land use action, evidence that proposed structures will be designed to comply with the above criteria shall be submitted to the ALUC under the following circumstances:

1. Any mobile home situated within HWD's 55-dB CNEL contour.

2. Any single- or multi-family residence situated within HWD's 60-dB CNEL contour.

3. Any hotel or motel, hospital or nursing home, church, meeting hall, office building, mortuary, school, library, museum, or other noise-sensitive non-residential use situated within HWD's 65-dB CNEL contour.

3.10-2 Safety

3.10-2.1 Objective

The intent of land use safety compatibility criteria for HWD is to minimize the risks to people and property on the ground in the event of an accident or emergency landing occurring outside the airport boundary. The most stringent land use controls shall be applied to the areas with greatest risk potential.

3.10-2.2 Airport Safety Zones

A total of six different safety zone configurations are delineated in a series of drawings shown in Figure 3-12. The intent of this set of zones is to ensure that risk levels be relatively uniform across each zone, but distinct from the other zones. The choice of safety zone criteria appropriate for a particular zone is largely a function of risk acceptability. Land uses (e.g., schools and hospitals) which, for a given proximity to the airport, are judged to represent intolerable risks must be prohibited. Where the risks of a particular land use are considered significant but tolerable, establishment of restrictions may reduce the risk to an acceptable level. Uses which are

basically acceptable generally require no limitations (See Table 2-2 for a list of compatible land uses within each safety zone).

3.10-2.3 Risks to People on the Ground

The primary method of reducing risks to people on the ground is to restrict land uses so as to limit the number of people who might gather in areas where aircraft accidents are most likely to occur. (Policies regarding the concentration of people in various land uses are provided in Chapter 2 of this document.)

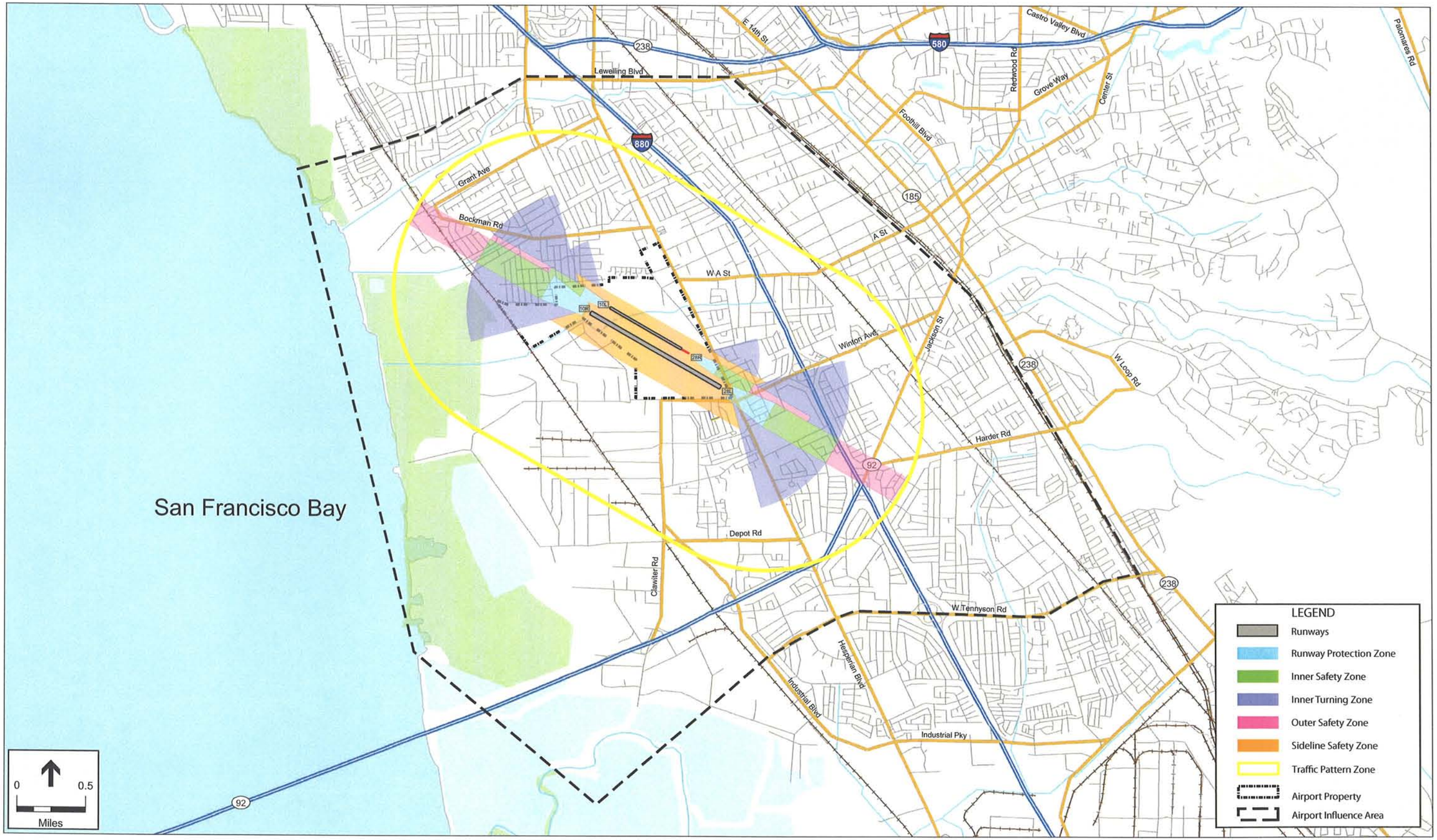
3.10-2.4 Land Uses of Particular Concern

Land uses which should attract the most concern are ones in which the occupants have reduced effective mobility or are unable to respond in emergency situations. Children's schools, day care centers, hospitals, nursing homes, and other uses in which the majority of occupants are children, elderly, and/or handicapped shall be prohibited within *Compatibility Zones A, B1*, and *B2*.

(a) For the purposes of these criteria, children's schools include all grades through grade 12.

(b) Day care centers and family day care homes are defined by state law. Non-commercial day care centers ancillary to a place of business are permitted in *Compatibility Zone D* provided that the overall use of the property meets the intensity criteria indicated in Table 3-5. Family day care homes are permitted in any location where residential development is permitted.

(c) Hospitals are medical facilities that include provision for overnight stays by patients. Medical clinics are permitted in *Compatibility Zone D* provided that these facilities meet the maximum intensity standards listed in Table 3-5.



SOURCE: ESA Airports, ESRI, City of Hayward GIS Department

Figure 3-12
HWD Safety Zones

3.10-2.5 Other Risks

Storage fuel and other hazardous materials within the airport environs are restricted as follows:

(a) Within *Compatibility Zones A and B1*, storage of any such substance is prohibited.

(b) Within *Compatibility Zone B2*, storage of fuel or other hazardous materials is permitted only as follows:

1. The substances are stored in underground tanks.

2. The quantity stored is no more than 2,000 gallons.

3.10-2.6 Criteria for Clustering of Development

The ALUC generally supports clustering as a means for both enhancing safety compatibility in the vicinity of airports and accomplishing other development objectives. Clustering occurs when development is concentrated on one portion of a site or within an overall compatibility zone, leaving other areas as open space because of terrain, environmental, or other considerations. The premise behind the concept of clustering is that, in a significant percentage of off-airport "mishaps," the aircraft are under some degree of control when forced to land. If the area remaining undeveloped is relatively level and free of large obstacles, clustering potentially allows a greater amount of open space towards which a pilot can land the aircraft; thus reducing the risk of harm to people on the ground.

(a) With respect to the vicinity of HWD, clustering is applicable to only nonresidential development (e.g. open spaces). As indicated in Table 3-5, usage intensity of new nonresidential development, including both indoor and outdoor occupancies, shall be limited to the following:

1. *Zone A*: No clustering is permitted.

2. *Zone B1*:

3. *Zone B2*:

4. *Zone C*:

5. *Zone D*:

3.10-2.7 Buyer Awareness Measures

Because all of the AIA is subject to aircraft overflights, it is important that prospective purchasers of property within this area, particularly residential properties, are informed about the property's proximity to HWD.

(a) Except where dedication of an avigation easement is required, a deed notice shall be recorded for each parcel associated with any land use action reviewed by the ALUC. A sample recorded deed notice is presented in Appendix E.

(b) Each land use jurisdiction affected by this ALUPP shall adopt a policy designating the AIA as an area that may be regularly subject to aircraft overflight. The policy shall note that owners and residents of property within the AIA may find such overflights to be annoying and/or disruptive to their enjoyment of the property. Property owners shall be put on notice that the proximity of HWD and the potential for routine aircraft overflights shall be disclosed in conjunction with any real estate transaction involving properties within the AIA.

(c) Land Use Conversion — the compatibility of uses in the AIA shall be preserved to the maximum feasible extent. Particular emphasis should be placed on preservation of existing agricultural and open space uses.

1. The conversion of land from existing or planned agricultural, industrial, or commercial use to residential uses within *Compatibility Zones A, B1, B2,* and *C* shall be prohibited.

2. In *Compatibility Zone B2,* general plan amendments (as well as other discretionary actions such as rezoning, subdivision approvals, use permits, etc.) that would convert land to residential use or increase the density of residential uses above existing levels should be subject to careful consideration of overflight impacts.

3.10-3 Airspace Protection

3.10-3.1 Purpose of ALUC Policies

Tall structures, trees, and other objects, particularly when located near airports or on high terrain, may constitute hazards to aircraft in flight. Federal regulations establish the criteria for evaluating potential obstructions. These regulations also require that the FAA be notified of proposals related to the construction of potentially hazardous structures. The FAA conducts "aeronautical studies" of these objects and determines whether they would be risks to aircraft, but it does not have the authority to prevent their creation. The purpose of ALUC airspace protection policies, together with regulations established by local land use jurisdictions and the state government, is to ensure that hazards to the navigable airspace are avoided.

3.10-3.2 ALUC Review of Height of Proposed Objects

Based upon FAA criteria, proposed objects that would exceed the heights indicated below for the respective compatibility zones potentially represent airspace obstruction issues. Development proposals that include any such objects shall be reviewed by the ALUC. Objects of lesser height normally would not have a potential for being airspace obstructions and therefore do not require ALUC review with respect to airspace protection criteria (noise and safety concerns may still be

present). Caution should be exercised, however, with regard to any object more than 50 feet high proposed to be located on a site that is substantially higher than surrounding terrain.

(a) Within *Compatibility Zone A*: The height of any proposed development, including vegetation, requires review.

(b) Within *Compatibility Zone B1*: ALUC review is required for any proposed object taller than 35 feet.

(c) Within *Compatibility Zone B2*: ALUC review is required for any proposed object taller than 50 feet.

(d) Within *Compatibility Zone C*: ALUC review is required for any proposed object taller than 75 feet.

(e) Within *Compatibility Zone D*: ALUC review is required for any proposed object taller than 150 feet. Such objects also require FAA review in accordance with the provisions of FAR Part 77.

3.10-3.3 Height Restriction Criteria

Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, provides guidance for the height of objects that may affect normal aviation operations. The guidance provided by Part 77 is not absolute, however. Deviation from the Part 77 standards does not necessarily mean that a safety hazard exists, only that offending objects must be evaluated by the FAA and that mitigative actions such as marking or lighting be taken if appropriate. Figure 3-13 depicts the Part 77 surfaces in the vicinity of HWD.

3.10-3.4 Obstruction Marking and Lighting

In general, the need for marking and lighting of obstruction is determined by the FAA as part of aeronautical studies conducted in accordance with FAR Part 77. Under most circumstances, when reviewing proposed structures that exceed the height criteria, The ALUC is expected to abide by the FAA's conclusions regarding marking and lighting requirements. However, situations may arise in which the Commission, because of its particular knowledge of local airports and airspace, may reach a different determination than that of the FAA. In such instances, the Commission may determine either that a proposed structure is unacceptable or that it is acceptable only if marked and lighted. Any marking and lighting that the Commission may require shall be consistent with FAA standards as to color and other features.

3.10-3.5 FAA Notification

Proponents of a project that may exceed the elevation of a Part 77 surface must notify the FAA as required by FAR Part 77, Subpart B, and by the State Aeronautics Act, Public Utilities Code Sections 21658 and 21659.

(a) Local jurisdictions shall inform project proponents of the requirements for notifying the FAA. For objects less than 50 feet in height, FAA notification will generally not be required except for locations within *Compatibility Zones A* and *B1*.

(b) The requirement for notifying the FAA shall not necessarily trigger an airport compatibility review of an individual project by the ALUC unless required in accordance with Policy 3.10-3.2.

(c) FAA review is required for any proposed structure more than 200 feet above the ground level of its site. All such proposals also shall be submitted to the ALUC for review regardless of where in the county the object would be located.

(d) Any project submitted to the ALUC for airport land use compatibility review for reasons of height issues shall include a copy of FAR Part 77 notification to the FAA and the results of the FAA's analysis.

3.10-3.6 Other Flight Hazards

Land uses that may cause visual, electronic, or bird strike hazards to aircraft in flight shall not be permitted within 12,500 feet of HWD runways (the outer limits of the conical surface as depicted in Figure 3-13). Specific characteristics to be avoided include:

(a) Glare or distracting lights that could be mistaken for airport lights;

(b) Sources of dust, steam or smoke that may impair pilot vision;

(c) Sources of electrical interference with aircraft communications or navigation; and

(d) Any use, especially landfills and certain agricultural uses, which may attract an increased number of birds.

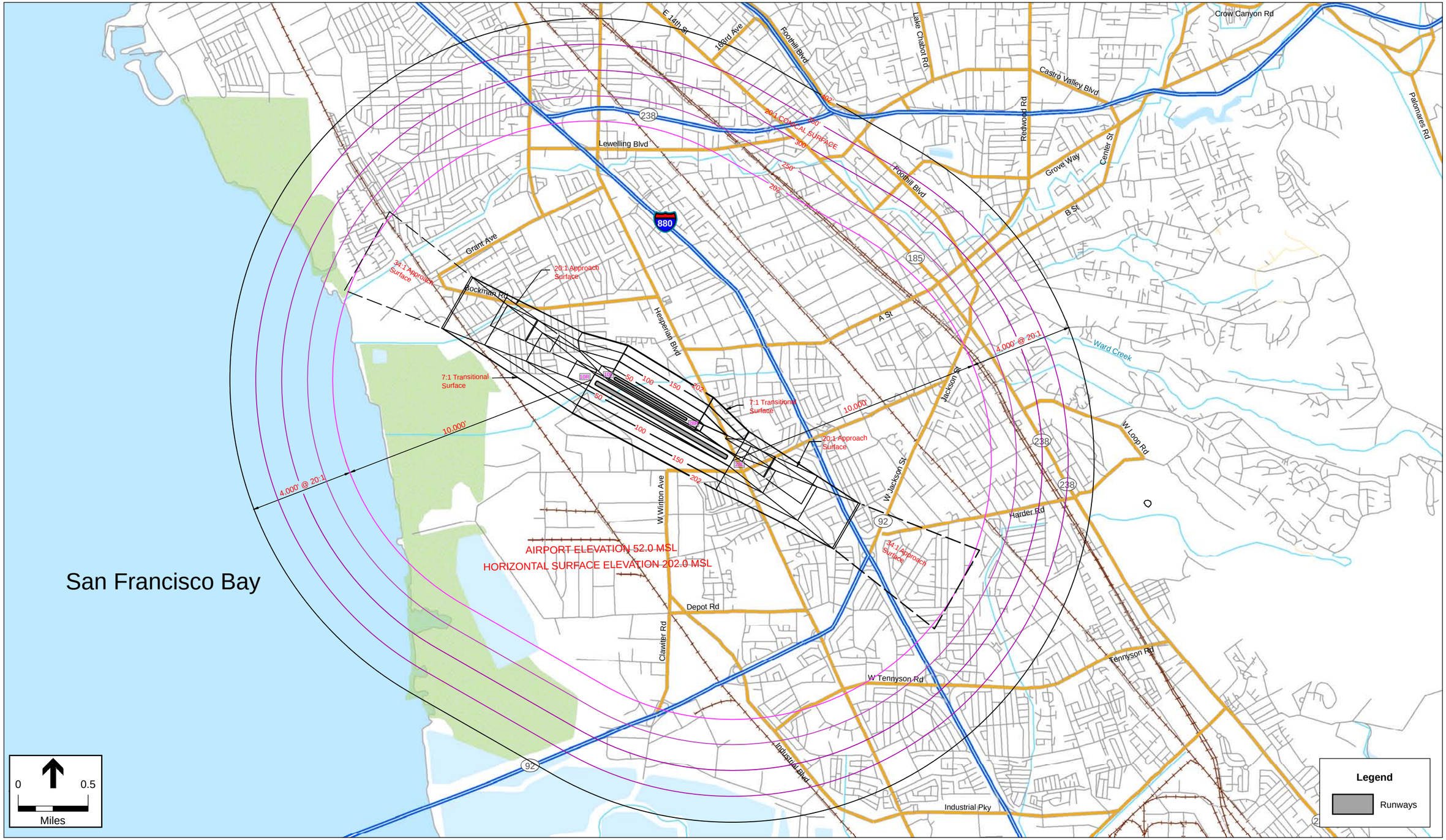


Figure 3-13
HWD Part 77 Surfaces

3.11 Conclusions and Recommendations